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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,235	08/13/2001	Stephen F. Gass	SDT 314	8810
27630	7590	10/01/2004	EXAMINER	
SD3, LLC 22409 S.W. NEWLAND ROAD WILSONVILLE, OR 97070			ALIE, GHASSEM	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/929,235

Applicant(s)

GASS ET AL.

Examiner

Ghassem Alie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 and 16-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 13-15, and 30-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/03/04-08/18/04</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. This Office action is in response to the amendment filed on 05/05/04 where claims 1-5, 13-15, and 30-33 are pending and claims 6-12 and 16-29 have been canceled.

***Special Circumstances***

2. Acknowledgment is made that applicant in response to the Examiner's request provided a list of co-pending applications with the amendment filed on 05/05/04.

***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982), *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970)', and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 & 13-15 are provisionally rejected under the judicially created doctrine

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of obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/052,705. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are all drawn towards a table saw having a blade, an adjustment mechanism, a brake mechanism, and a brake positioning system used to position the brake in an operable position relative to the blade as the adjustment mechanism adjusts the position of the blade.

5. Claims 1, 13 & 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/052,705. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims both refer to a brake positioning system used with a saw blade that is adjusted vertically up and down.

It should be noted that the obviousness-type double patenting rejections, above, stand. However, at the request of the applicant the discussion of the obviousness-type double patenting rejections is postponed until remaining issues with this application and co-pending application No. 10/052,705 are resolved.

***Comments on Commonly Assigned Application***

6. Acknowledgment is made that applicant acknowledged that the inventions claimed in the present application and in the co-pending application No. 10/052,705 are owned or subject to an obligation of assignment to SD3, LLC at the time the later invention was made.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 13-15, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 1,811,066 to Tannewitz in view of US 3,785,230 to Lokey.

Tannewitz discloses the invention substantially as claimed including a table saw comprising: a frame 1 including a table 2 defining a work surface; a rotatable blade 5 coupled to the frame and extendable up through the work surface; an adjustment mechanism 3/19 configured to adjust the position of the blade relative to the table, a brake mechanism configured to engage and stop the blade, and a brake positioning system 8/11 configured to adjust the position of the brake mechanism to maintain the brake mechanism in an operative position relative to the blade as the position of the blade is adjusted. The adjustment mechanism is configured to adjust the vertical and angular positions of the blade relative to the table. The blade is coupled to the frame by a support structure 17 that is selectively positionable relative to the frame, and the brake mechanism is coupled to the support structure. The support structure includes an arbor block adapted to support the brake mechanism and a rotatable arbor 6 that hold the blade.

Tannewitz does not disclose a detection system configured to detect contact between a person and the blade, and brake mechanism is actuated upon detection of contact between the person and the blade. Lokey teaches the use of a safety system for a saw that senses the capacitance on a saw blade 113 and when a certain level is reached, a brake pawl 125 is actuated to engage the cutting teeth of the saw blade to

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instantaneously stop the saw blade (column 2, lines 32-62). Although the safety system of Lokey is set up to detect proximity instead of contact, only the values of the electrical components of Lokey would need to be altered in order for the sensor to sense contact, and changing those values to detect contact would have been obvious to one skilled in the art at the time of the invention in order to avoid triggering the safety system when the user is close to the blade but not in danger of being cut. It would have been obvious to one skilled in the art at the time of the invention to use the brake pawl and safety system of Lokey to detect contact of a user and the blade of Tannewitz in order to make the saw of Tannewitz safer.

Regarding claim 30, Tannewitz teaches everything noted above including that the blade 5 includes a perimeter and a cutting edge around its perimeter. Tannewitz does not teach that the brake mechanism is configured to engage the cutting edge of the blade to stop the blade upon detection of contact between the person and the blade. However, Lokey teaches a brake mechanism 125 (or a rubber brake block) that is configured to engage the cutting edge of the blade 113 upon the detection of contact between the person and the blade. See Fig. 7 in Lokey. As discussed above, the Lokey's detection system can be modified in a manner that activates the brake mechanism system upon the detection of the contact between a person and the blade. It would have been obvious to a person of ordinary skill in the art at the time of invention to replace Tannewitz's brake shoe mechanism 12 with the rubber brake block 125 as taught by Lokey and engage the rubber brake block with the perimeter of the blade as also taught by Lokey, since Tannewitz's brake shoe and Lokey's rubber brake block function the same and both stop the blade from rotating. In addition, it would have been

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obvious to a person ordinary skill in the art at the time of invention to extend the arm 11 of Tannewitz brake mechanism up to perimeter of the blade in order to engage the brake rubber block with the cutting edge of the blade as taught by Locky. Furthermore, It would have been obvious to one skilled in the art to minimize the amount of time it would take to reach the blade and maximize the acceleration of the pawl into the teeth in order to stop the blade as quickly as possible, and stopping the blade within 5 milliseconds after contact is detected by accelerating the pawl at  $300 \text{ m/s}^2$  would be possible using very close spacing and a fast solenoid, both of which would have been obvious to one skilled in the art to use in order to provide the desired safe stopping time.

Regarding claim 31, Tannewitz teaches everything noted above that the adjustment means 3,9 is configured to tilt the blade 5 relative to the table 2. See Fig. 1 in Tannewitz.

Regarding to claim 32, Tannewitz teaches everything noted above including an adjustment means for changing the elevation of the blade 5 relative to the table 2.

Regarding claim 32, Tannewitz as modified by Locky teaches everything noted above including that the brake positioning system 8, 11, as modified by Locky, is further configured to support the brake mechanism when the brake mechanism when the brake mechanism engages the blade 5. See Fig. 1 in Tannewitz and Fig. 7 in Locky.

### ***Response to Arguments***

9. Applicant's arguments filed on 05/052/04 have been considered but are not persuasive. Applicant's arguments that it is not obvious to a person of ordinary skill in the art to alter the electrical components of Locky's detection device or sensor to detect contact between a person and the cutting blade are not persuasive. Locky's sensor detects the

proximity of a person to the cutting blade. Locky's detection system detects the proximity of a person to the cutting blade and inherently has inputted and known value that represent the distance between the person and the blade. This value could be altered according to the desired distance between the person and the blade. For example, if it is desired that the sensor detect a contact between the person and the blade, the mentioned value could be set at zero. The alarm of the safety system inherently goes off and the light turns on when the sensor detects a contact between a person and the blade. Therefore, Locky's detection system is capable of detecting contact between a person and the cutting blade. Applicant's argument that Locky's does not say or suggest that his detecting system can be used to detect contact between a person and a cutting tool is not persuasive. It is not necessary that Locky says or suggests that the detecting system can be to detect a contact between a person and a cutting blade. The fact is that Locky's detecting system is capable of detecting contact between a person and a cutting blade. In addition, it is within the knowledge of ordinary skill in the art to alter the preset value of the Locky's detecting system, as discussed above, to a desired value that could translate to a desired distance between a person and the cutting blade of the cutting machine. This distance is within the range of zero to the maximum distance that sensor is able to detect. Applicant's argument that simple desire to make the saw safer cannot be sufficient motivation to combine Tannewitz's cutting machine with Locky's safety system is not persuasive. It is within the skill of a person of ordinary skill in the art to modify a cutting machine and make it safer. Therefore, adding any safety system to Tannewitz's cutting machine in order to make it safer is within the skill of a person of ordinary skill in the art. In this case, Locky's safety system is a good candidate since Locky's sawing machine is



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similar to Tannewitz's sawing machine. Locky implicitly teaches that a saw machine can be safer by having a detecting mechanism for detecting proximity of a person to cutting blade. Locky also clearly suggesting that this type of detecting system can be used for safety of an operator. Therefore, there is a suggestion in Locky for combining a cutting machine without the safety such as Tannewitz's cutting machine with a safety system for the cutting machine such as Lock's safety system.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (703) 305-4981. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (703) 305-1082. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

GA/ga

September 26, 2004

  
BOYER ASHLEY  
PRIMARY EXAMINER